

Abbreviated Report Form

Heating Energy Analysis Comparison Report

Builder's Name: Project Address: City/Township/County:

PROPOSED ALTERNATIVE HOUSE		STANDARD DESIGN HOUSE	
ROOF/CEILING (INC. SKYLIGHTS)	SUBTOTALS	ROOF/CEILING (INC. SKYLIGHTS)	SUBTOTALS
$A_1 \text{ _____ } / R_1 \text{ _____ } = A_1 / R_1 \text{ _____}$ $A_2 \text{ _____ } / R_2 \text{ _____ } = A_2 / R_2 \text{ _____}$ $A_3 \text{ _____ } / R_3 \text{ _____ } = A_3 / R_3 \text{ _____}$ $A_1 / R_1 + A_2 / R_2 + A_3 / R_3 =$ Total Roof/Ceiling Area	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 1	<div style="text-align: right; padding-right: 20px;"> $Z_1 0.034$ $Z_2 0.032 =$ $Z_3 0.030$ </div> Total Roof/Ceiling Area	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line A
GROSS WALL		GROSS WALL	
Opaque Wall (Does not include band joist, windows, doors, etc.) $A_1 \text{ _____ } / R_1 \text{ _____ } = A_1 / R_1 \text{ _____}$ $A_2 \text{ _____ } / R_2 \text{ _____ } = A_2 / R_2 \text{ _____}$ $A_1 / R_1 + A_2 / R_2 =$	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 2		
Band Joist $A \text{ _____ } / R \text{ _____ } = A / R \text{ _____ } =$	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 3		
Fenestration and Doors, Windows $A_1 \text{ _____ } / R_1 \text{ _____ } = A_1 / R_1 \text{ _____}$ $A_2 \text{ _____ } / R_2 \text{ _____ } = A_2 / R_2 \text{ _____}$ $A_3 \text{ _____ } / R_3 \text{ _____ } = A_3 / R_3 \text{ _____}$ $A_1 / R_1 + A_2 / R_2 + A_3 / R_3 =$	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 4		
Doors $A_1 \text{ _____ } / R_1 \text{ _____ } = A_1 / R_1 \text{ _____}$ $A_2 \text{ _____ } / R_2 \text{ _____ } = A_2 / R_2 \text{ _____}$ $A_1 / R_1 + A_2 / R_2 =$	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 5		
Other $A \text{ _____ } / R \text{ _____ } = A / R \text{ _____ } =$ Total Gross Wall Area	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 6		
GROSS WALL SUBTOTAL A/R (Lines: 2+3+4+5+6)	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line 7	<div style="text-align: right; padding-right: 20px;"> $Z_1 0.15$ $Z_2 0.14 =$ $Z_3 0.13$ </div> Total Gross Wall Area	<div style="border-bottom: 1px solid black; width: 50px; margin: 0 auto;"></div> Line B

FOUNDATION/FLOOR	SUBTOTALS
Floors Over Unconditioned Spaces	
A _____ /R _____ = A/R _____ =	_____ Line 8
Slab on Grade Floors (Area = Perimeter x 2')	
A _____ /R _____ = A/R _____ =	_____ Line 9
Crawl Space Walls (Area: Top foundation wall to average finished grade)	
A _____ /R _____ = A/R _____ =	_____ Line 10
Basement Walls (Area: Top foundation wall to average finished grade)	
A ₁ _____ /R ₁ _____ = A ₁ /R ₁ _____	
A ₂ _____ /R ₂ _____ = A ₂ /R ₂ _____	
A ₁ /R ₁ + A ₂ /R ₂ =	_____ Line 11
Basement Windows	
A _____ /R _____ = A/R _____ =	_____ Line 12
Total Gross Basement Wall Area	
FOUNDATION/FLOOR SUBTOTAL A/R (Lines: 8+9+10+11+12)	_____ Line 13
PROPOSED ALTERNATIVE HOUSE SUB-TOTAL A/R (Lines: 1+7+13)	_____ Line 14
HEATING EQUIPMENT EFFICIENCY (If the same as Standard House, go to line 16 or 17)	
(Oil or Gas Fired) AFUE: _____%	
Line 14: _____ = Adjusted A/R =	
AFUE: 0._____	_____ Line 15
AIR LEAKAGE RATE (If the same as Standard House, go to line 17)	
_____ ACH x _____ ft ³ x 0.018 =	
Air Changes per Hour Volume of House	_____ Line 16
PROPOSED ALTERNATIVE HOUSE TOTAL (Lines: 15+16)	
Equal to or less than line L to pass	_____ Line 17

FOUNDATION/FLOOR	SUBTOTALS
Floors Over Unconditioned Spaces	
_____ x $\frac{Z_1 0.05}{Z_2 0.05} = \frac{Z_3 0.033}{Z_3 0.033}$	_____ Line C
Total Floor Area	
Slab on Grade (Unheated)	
_____ x $\frac{Z_1 0.16}{Z_2 0.14} = \frac{Z_3 0.13}{Z_3 0.13}$	_____ Line D
Total Slab Edge Area	
Slab on Grade (Heated)	
_____ x $\frac{Z_1 0.12}{Z_2 0.10} = \frac{Z_3 0.10}{Z_3 0.10}$	_____ Line E
Total Slab Edge Area	
Crawl Space	
_____ x $\frac{Z_1 0.15}{Z_2 0.14} = \frac{Z_3 0.13}{Z_3 0.13}$	_____ Line F
Total Crawl Space Wall Area	
Basement Walls	
_____ x $\frac{Z_1 0.15}{Z_2 0.14} = \frac{Z_3 0.13}{Z_3 0.13}$	_____ Line G
Total Gross Basement Wall Area	
FOUNDATION/FLOOR SUBTOTAL A/R (Lines: C+D+E+F+G)	_____ Line H
STANDARD DESIGN HOUSE SUB-TOTAL A/R (Lines: A+B+H)	_____ Line I
HEATING EQUIPMENT EFFICIENCY	
(Oil or Gas Fired) AFUE: 78%	
Line I: _____ = Adjusted A/R =	
AFUE: 0.78	_____ Line J
AIR LEAKAGE RATE	
0.8 ACH x _____ ft ³ x 0.018 =	
Volume of House	_____ Line K
STANDARD DESIGN LIMIT TOTAL (Lines: J+K)	
	_____ Line L